

## CAFE Info Sheet 5

### Definitions

Model Type - a unique combination of car line, basic engine, and transmission class. This is the classification of vehicles used to report information for CAFE. It is defined on the basis of being readily recognized by consumers and being important from a fuel economy perspective.

Car Line - denotes a group of vehicles within a make or car division which is similar in construction. Features such as roofline or number of doors, seats, or windows generally do not distinguish car lines, nor is the degree of decor or opulence considered. Station wagons are considered distinct car lines from sedans.

Basic Engine - includes the manufacturer, number of engine cylinders, engine displacement, and the fuel system. For example, engines might have 4-, 6-, or 8-cylinders or some other number, displacement is measured in cubic inches to give the cubic inch displacement (CID) or in liters, and the fuel system is carburetted, throttle-body fuel-injected, or multi-point fuel injected. Separate categories are also available for turbo-charged or supercharged engines, police-only configurations, and the use of variable valve timing.

Transmission Class - determined by whether the transmission is manual, automatic, semi-automatic, or continuously 'Variable, along with the number of forward gears (three-, four-, or five-speed), and the drive system (four-, front-, or rear-wheel drive).

Base Level-a unique combination of inertia weight CIRS3, basic engine, and transmission class. It differs from model type in that inertia weight is substituted for car line. Car line is readily identifiable by consumers, but inertia weight allows a more accurate estimate of the fuel economy. A base level may be in two or more different car lines and the same car line may consist of more than one base level.

Inertia Weight - determined from the curb weight of the vehicle plus 300 pounds (called the loaded vehicle weight). The inertia weight class contains a range of loaded vehicle weights, as defined in 40 CFR Part 86.

Vehicle Configuration-a unique combination of base level, engine code, transmission configuration, and axle ratio.

Engine Code - isolates different variations and calibrations of carburetor, distributor, and other key engine and emission control system components within the basic engine classification.

Transmission Configuration - considers shift calibrations, individual gear ratios, and other design factors that determine the performance of the transmission within the transmission class.

Axel Ratio - refers to the number of times the input shaft to the differential (or equivalent) turns for each turn of the driver wheels.

Subconfiguration-Adds two more parameters to the six in the vehicle configuration classification: equivalent test weight and road-load horsepower.

Equivalent Test Weight - subdivisions of the inertia weight class which more closely approximate the weight of the actual test vehicle. It is the weight within an inertia weight class which is used for the dynamometer test setting. Usually two equivalent test weights are specified for each inertia weight class.

Road-load horsepower - horsepower required to compensate for losses experienced by vehicles on the road that are not present during dynamometer testing. This consists primarily of aerodynamic drag.

For more information, write or call  
Certification Division, NVFEL  
2565 Plymouth Road,  
Ann Arbor, MI 48105  
(734) 214-4402

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